system model represents without running the system by observing changes in the model as data is manipulated. Applicant will address this issue on Appeal.

U.S. Patent Publication No. 2005/0043933 to Rappaport et al. discloses a technique for observing the performance of a communications system. For at least the reasons given below, Applicant submits that Rappaport et al. does not teach a method and related system for analyzing a sub-model of a full system model that includes defining a sub-model as a collection of entities in a visual medium; determining which of the entities in the sub-model are calculation entities and which are data entities; converting the calculation entities in the sub-model that depend on entities in the full model that are not included in the sub-model into temporary data entities; identifying output entities in the sub-model, where the output entities are calculation entities that do not have an output to another entity; and visually analyzing changes in the sub-model in response to performing the calculations for the calculation entities, wherein visually analyzing changes in the sub-model includes analyzing changes in the size of at least one data entity.

As stated in the response to the previous Office Action, Applicant has defined data entities and calculation entities in the specification, particularly in paragraph 23. Entities are visual objects that include one or more values. A data entity has a predetermined data value or values. A calculation entity includes a formula that calculates an output based on input values, where the input values come from other entities, including data entities and/or other calculation entities. The relationship between the entities are shown by arrows.

In the claimed invention, a sub-model is defined as a part of a full system model. Once the sub-model is defined, those calculation entities in the sub-model that depend on entities in the full model that are outside of the sub-model are converted to

data entities. One or more of the entities in the sub-model may be identified as output entities if they are calculation entities that do not have an output to another entity. When the sub-model is run, the formulas in the calculation entities are calculated, and the size of one or more of the data entities in the sub-model changes in response thereto. A person can visually look at the changes in the data entities to determine the operation of that portion of the full system model. Thus, a portion of a full model can be run without having to run the full model or the system.

The Examiner has directed Applicant's attention to paragraphs 73, 75, 79 and 81 of Rappaport et al. to teach the several elements of Applicant's claimed invention discussed above. The Examiner appears to suggest that the walls and other physical parameters in the CAD rendition of a building shown in figure 1 are data entities that are part of a sub-model. Further, the Examiner appears to suggest that electrical sources of RF noise, attenuation and other characteristics of the internal walls can be considered calculation entities, citing paragraph 75.

Applicant respectfully submits that the 3-D computer aided design rendition of a building or a collection of buildings shown in figures 1-3 is not a rendition of a sub-model of a full system model of the type claimed by Applicant. The rendition shown in figures 1-3 may be considered a full system model. However, Rappaport et al. does not appear to separate the rooms and such from the building for analysis as a separate sub-model. Applicant submits that in some sense the electrical attenuation values given to the walls in the rendition can be considered data, but Applicant further submits that Rappaport et al. has not distinguished these values as one type of entity and the RF sources as another type of entity, particularly an entity that has a formula for data calculations.

Moreover, Rappaport et al. does not appear to teach or suggest converting calculation entities in the sub-model that depend on entities in the full model that are not included in the sub-model into temporary data entities. The Examiner states that, "Rappaport teaches that windows are assigned specific values such as 2dB penetration loss although that value would necessarily change based on many varying factors" to satisfy this feature of Applicant's invention. Applicant submits that assigning the windows a specific dB loss does not properly teach this feature of Applicant's invention under §102.

Further, Applicant respectfully submits that the Examiner's position that "entities such as received signal strength are output entities without output to another entity" teaches the claimed feature of identifying output entities as calculation entities that do not have an output to another entity can be is a mischaracterization of what is fairly taught and suggested by paragraph 75 for §102 purposes.

Also, it is Applicant's position that the discussion in paragraph 81 of looking at variations in the shape, color and height of cylinders, rectangular, prisms, spheres, cubes or other objects does not teach the feature of Applicant's invention of performing calculations by the calculation entities, and analyzing changes in the size of at least one data entity. Particularly, figure 3 shows a comparison in performance values where cylinders of varying height and color indicate differences between predicted and measured data (paragraph 81). Applicant submits that viewing the differences in a shape to indicate differences between predicted and measured data is different than performing calculations and then looking at changes in the size of data entities based on the calculations.

In view of the preceding comments, Applicant respectfully submits that Rappaport et al. does not fairly teach Applicant's independent claims 1, 8 and 13. It is therefore requested that the §102(e) rejection be withdrawn.

It is believed that this application is in condition for allowance. If the Examiner believes that personal contact with Applicant's representative would expedite prosecution of this application, he is invited to call the undersigned at his convenience.

Respectfully submitted,

By: John A. Miller

John A. Miller
Reg. No. 34985
Phone: (248) 364-4300

General Motors Corporation
300 Renaissance Center
P.O. Box 300
Detroit, MI 48265-3000
(313) 665-4708

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